

WHAT IS CLAIMED IS:

1. A navigation apparatus comprising:

an acquisition device for acquiring the current position of a  
5 moving body;

a registration device that is used when registering the destination  
to which said moving body is to reach;

a reading device in which a portable recording medium on which  
map data is recorded is mounted and which reads at least the map data  
10 recorded on the portable recording medium;

a setting device for setting a route to said destination based on  
the acquired current position, the registered destination and the  
recorded map data;

a memory device for storing map data used route guidance for the  
15 moving body based on the set route; and

a transfer device for transferring the map data, which has a  
preset geographical range that includes the road set as the route, based  
on the current position of the moving body and the set route from said  
portable recording medium to the memory device.

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2. The navigation apparatus according to claim 1, wherein

said transfer device, when transferring the map data, sets a  
geographical range for the map data based on preset transfer conditions,  
and then transfers the map data from said portable recording medium to  
25 said recording medium based on the set geographical range.

3. The navigation apparatus according to claim 2, wherein

said transfer device sets the geographical range of the map data  
with at least one of the amount of the map data and the route

characteristics indicating the characteristics of the set route as the transfer condition.

4. The navigation apparatus according to claim 3, wherein

5 said transfer device sets the geographical range of the map data with the road characteristics, which includes at least one of the type of the set route, points along the way including preset conditions for the set route, and characteristics of district indicated by map data, as the transfer condition.

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5. The navigation apparatus according to claim 1, wherein

in the case where the entire map is divided into a plurality of blocks, and the divided block map data is recorded on said portable recording medium,

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said transfer device transfers the plurality of blocks of block map data recorded on said portable recording medium to said memory device in block units based on the geographical range of the map data.

6. The navigation apparatus according to claim 2, wherein

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in the case where the entire map is divided into a plurality of blocks, and the divided block map data is recorded on said portable recording medium,

said transfer device transfers the plurality of blocks of block map data recorded on said portable recording medium to said memory device

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in block units based on the geographical range of the map data.

7. The navigation apparatus according to claim 3, wherein

in the case where the entire map is divided into a plurality of blocks, and the divided block map data is recorded on said portable

recording medium,

said transfer device transfers the plurality of blocks of block map data recorded on said portable recording medium to said memory device in block units based on the geographical range of the map data.

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8. The navigation apparatus according to claim 4, wherein  
in the case where the entire map is divided into a plurality of blocks, and the divided block map data is recorded on said portable recording medium,

10 said transfer device transfers the plurality of blocks of block map data recorded on said portable recording medium to said memory device in block units based on the geographical range of the map data.

9. A navigation map data acquisition method comprising:  
15 an acquisition step of acquiring the current position of a moving body;

a registration step of registering the destination to which said moving body is to reach;

20 a reading step of reading the map data recorded on a mounted portable recording medium; and

a recording step of transferring the map data, which has a preset geographical range that includes the road set as the route, based on the current position of the moving body and the set route from said portable recording medium to a memory device, and recording the transferred  
25 map data on said memory device as the map data for using route guidance for the moving body based on the set route.

10. The navigation map data acquisition method according to claim 9, wherein

said recording step of setting a geographical range for the map data based on preset transfer conditions when transferring the map data, and then transferring the map data from said portable recording medium to said recording medium based on the set geographical range.

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11. A recording medium wherein a map data acquiring program is recorded so as to be read by a computer, the computer included in a navigation apparatus for navigating a mobile body, said program causing the computer to function as:

10 an acquisition device for acquiring the current position of a moving body;

a registration device for registering the destination to which said moving body is to reach;

15 a reading device for reading the map data recorded on a mounted portable recording medium; and

a recording device for transferring the map data, which has a preset geographical range that includes the road set as the route, based on the current position of the moving body and the set route from said portable recording medium to a memory device, and recording the transferred map data on said memory device as the map data for using route guidance for the moving body based on the set route.

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12. The recording medium according to claim 11, wherein the program further causes the computer to function as

25 said recording device for setting a geographical range for the map data based on preset transfer conditions when transferring the map data, and then transferring the map data from said portable recording medium to said recording medium based on the set geographical range.